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atg gag aaa aag tgt acc ctg tat ttt ctg gtt etc ttg cct ttt ttt atg att ctt gtt 60
 1 M E K K C T L Y F L V L L P F F M I L V

aca gca gaa tta gaa gag agt cct gag gac tca att cag ttg gga gtt act aga aat aaa 120
 21 T A E L E E S P E D S I Q L G V T R N K

atc atg aca gct caa tat gaa tgt tac caa aag att atg caa gac ccc att caa caa gca 180
 41 I M T A Q Y E C Y Q K I M Q D P I Q Q A

gaa ggc gtt tac tgc aac aga acc tgg gat gga tgg etc tgc tgg aac gat gtt gca gca 240
 61 E G V Y C N R T W D G W L C W N D V A A

gga act gaa tca atg cag etc tgc cct gat tac ttt cag gac ttt gat cca tca gaa aaa 300
 81 G T E S M Q L C P D Y F Q D F D P S E K

gtt aca aag atc tgt gac caa gat gga aac tgg ttt aga cat cca gca agc aac aga aca 360
 101 V T K I C D Q D G N W F R H P A S N R T

tgg aca aat tat acc cag tgt aat gtt aac acc cac gag aaa gtg aag act gca cta aat 420
 121 W T N Y T Q C N V N T H E K V K T A L N

ttg ttt tac ctg acc ata att gga cac gga ttg tct att gca tca ctg ctt atc tgc ctt 480
 141 L F Y L T I I G H G L S I A S L L I S L

ggc ata ttc ttt tat ttc aag agc cta agt tgc caa agg att acc tta cac aaa aat ctg 540
 161 G I F F Y F K S L S C Q R I T L H K N L

ttc ttc tca ttt gtt tgt aac tct gtt gta aca atc att cac etc act gca gtg gcc aac 600
 181 F F S F V C N S V V T I I H L T A V A N

aac cag gcc tta gta gcc aca aat cct gtt agt tgc aaa gtg tcc cag ttc att cat ctt 660
 201 N Q A L V A T N P V S C K V S Q F I H L

tac ctg atg ggc tgt aat tac ttt tgg atg etc tgt gaa ggc att tac cta cac aca etc 720
 221 Y L M G C N Y F W M L C E G I Y L H T L

att gtg gtg gcc gtg ttt gca gag aag caa cat tta atg tgg tat tat ttt ctt ggc tgg 780
 241 I V V A V F A E K Q H L M W Y Y F L G W

gga ttt cca ctg att cct gct tgt ata cat gcc att gct aga agc tta tat tac aat gac 840
 261 G F P L I P A C I H A I A R S L Y Y N D

aat tgc tgg atc agt tct gat acc cat etc etc tac att atc cat ggc cca att tgt gct 900
 281 N C W I S S D T H L L Y I I H G P I C A

gct tta ctg gtg aat ctt ttt ttc ttg tta aat att gta cgc gtt etc atc acc aag tta 960
 301 A L L V N L F F L L N I V R V L I T K L

aaa gtt aca cac caa gcg gaa tcc aat ctg tac atg aaa gct gtg aga gct act ctt atc 1020
 321 K V T H Q A E S N L Y M K A V R A T L I

ttg gtg cca ttg ctt ggc att gaa ttt gtg ctg att cca tgg cga cct gaa gga aag att 1080
 341 L V P L L G I E F V L I P W R P E G K I

gca gag gag gta tat gac tac atc atg cac atc ctt atg cac ttc cag ggt ctt ttg gtc 1140
 361 A E E V Y D Y I M H I L M H F O G L L V

tct acc att ttc tgc ttc ttt aat gga gag gtt caa gca att ctg aga aga aac tgg aat 1200
 381 S T I F C F F N G E V Q A I L R R N W N

caa tac aaa atc caa ttt gga aac agc ttt tcc aac tca gaa gct ctt cgt agt gcg tct 1260
 401 Q Y K I Q F G N S F S N S E A L R S A S

tac aca gtg tca aca acc agt gat ggt cca ggt tat agt cat gac tgt cct agt gaa cac 1320
 421 Y T V S T I S D G P G Y S H D C P S E H

tta aat gga aaa agc atc cat gat att gaa aat gtt etc tta aaa cca gaa aat tta tat 1380
 441 L N G K S I H D I E N V L L K P E N L Y

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 462 N END

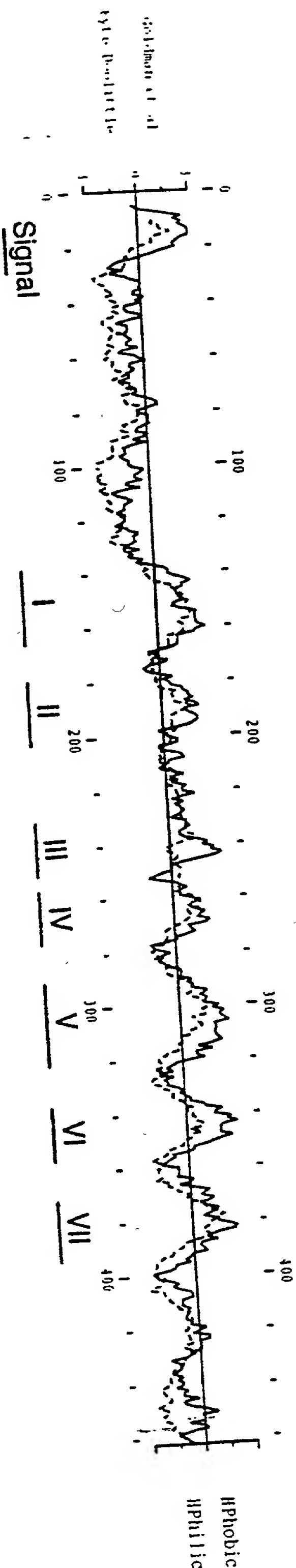
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 gttaatatctgatactgtatctgggctgatttttttaataaaatagagctgtggaatgtcaaaaaaaaaaaaaaaaaa 2481

FIGURE 1

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Hydropathy Plot of the Human CGRP Receptor Peptide Sequence



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FIGURE 2

1995-1996, 1997-1998

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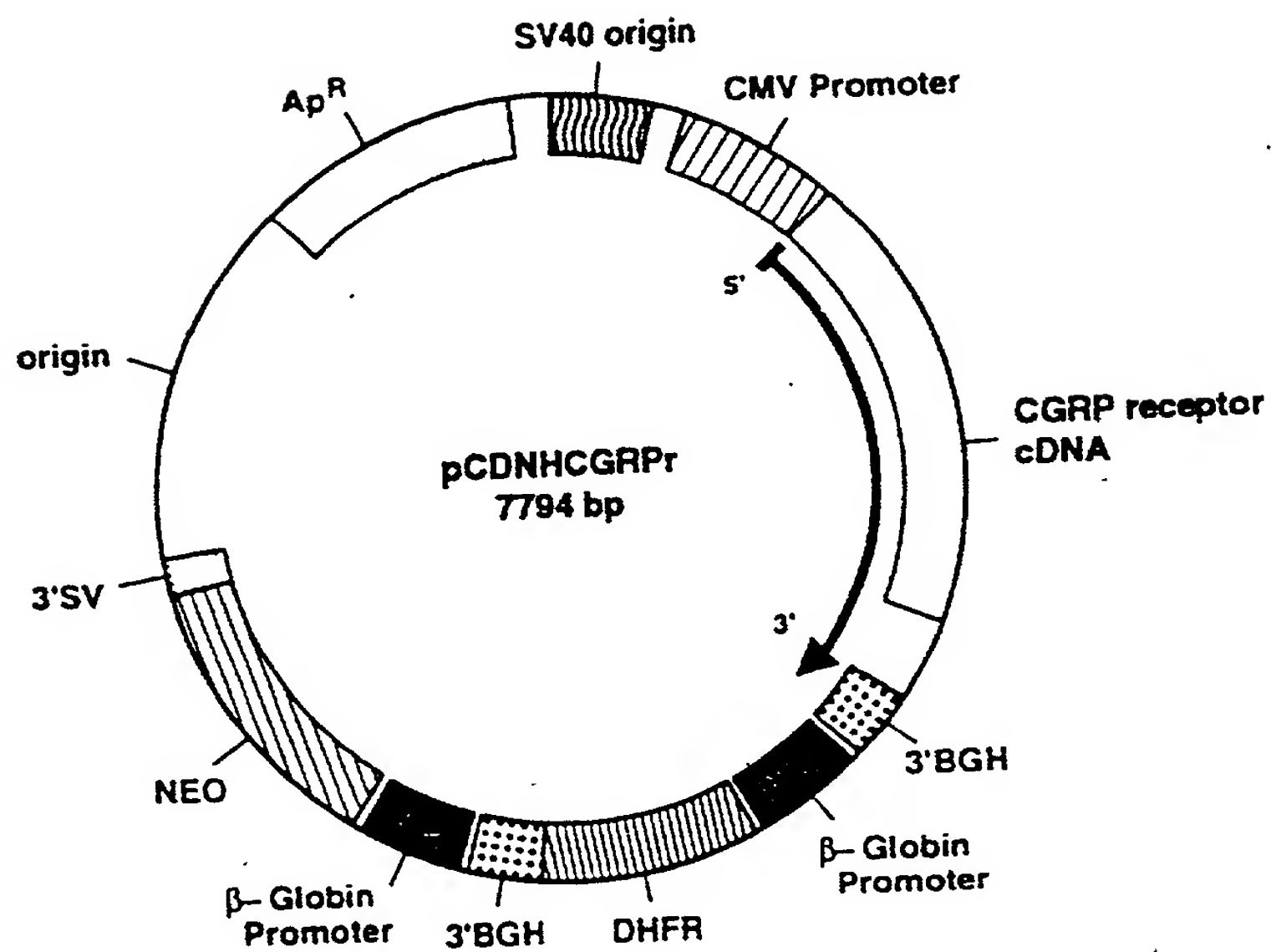


FIGURE 3

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cAMP RESPONSE IN 293 CELLS

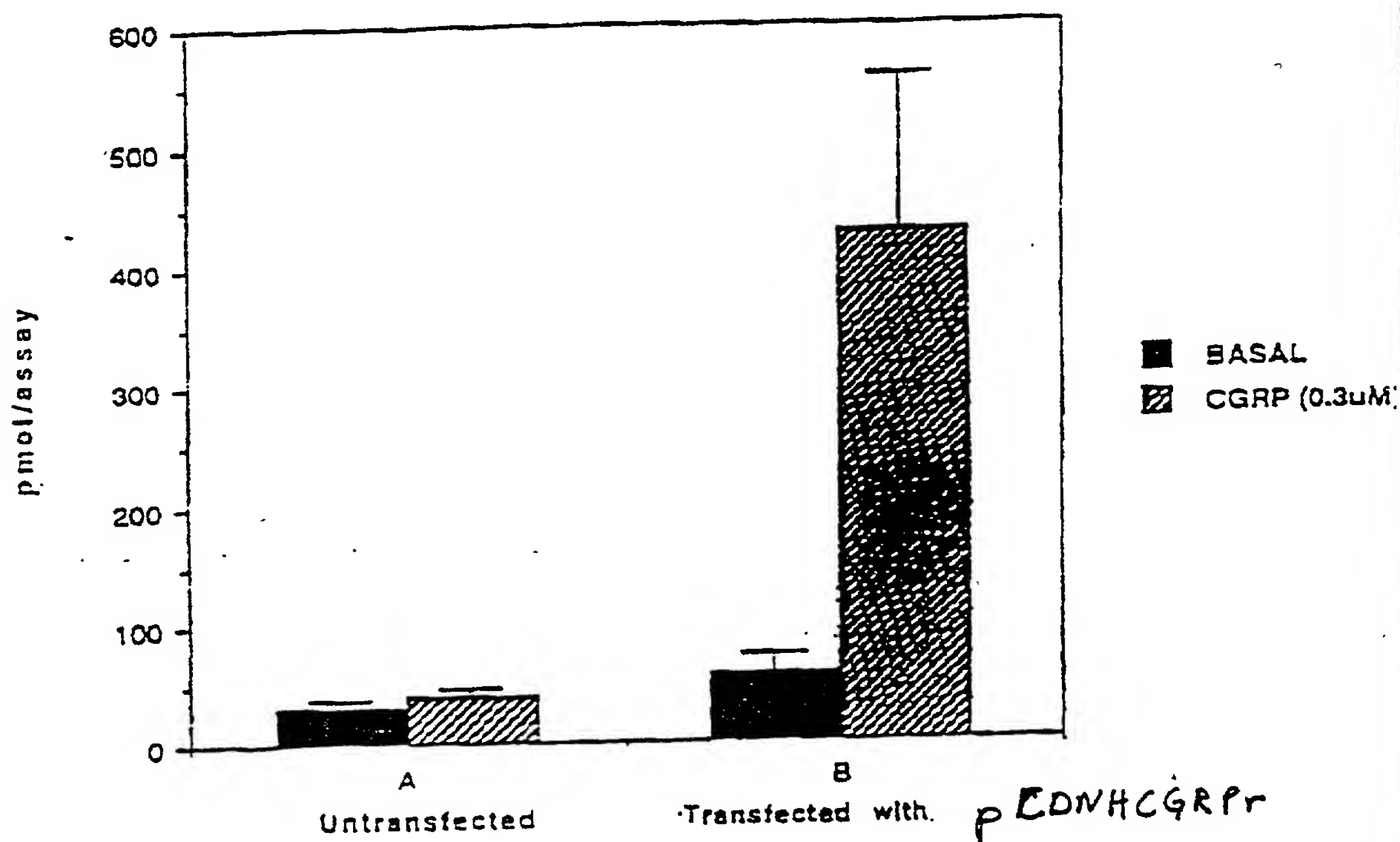


FIGURE 4

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EFFECT OF CGRP
TREATMENT OF 293 CELL LINES STABLY TRANSFORMED WITH THE
pCDNHCGRP₁ CONSTRUCT

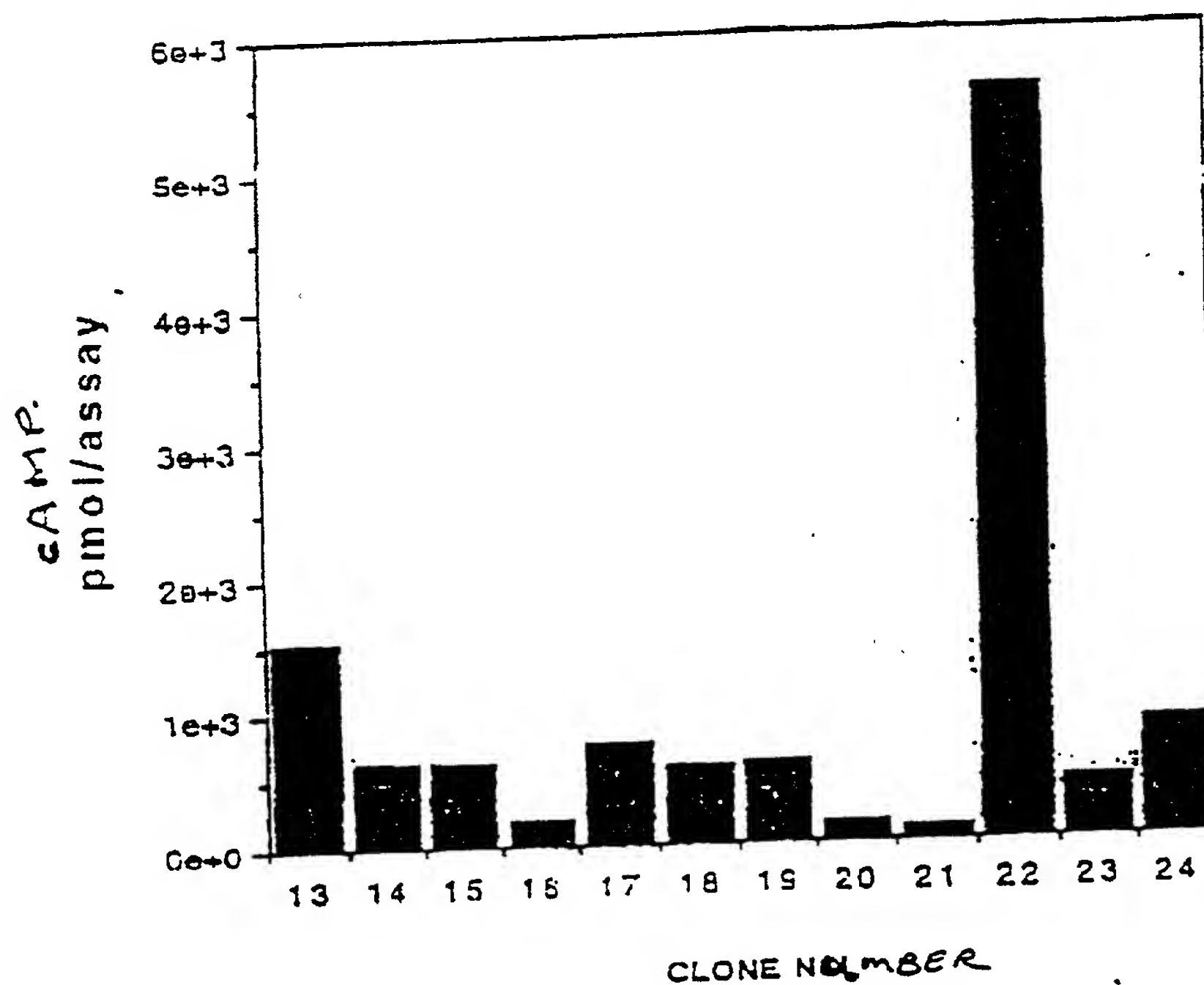


FIGURE 5

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PCDNH-CGRP
CGRP-MEDIATED cAMP IN STABLY TRANSFORMED 293 CELLS (CLONE 22)

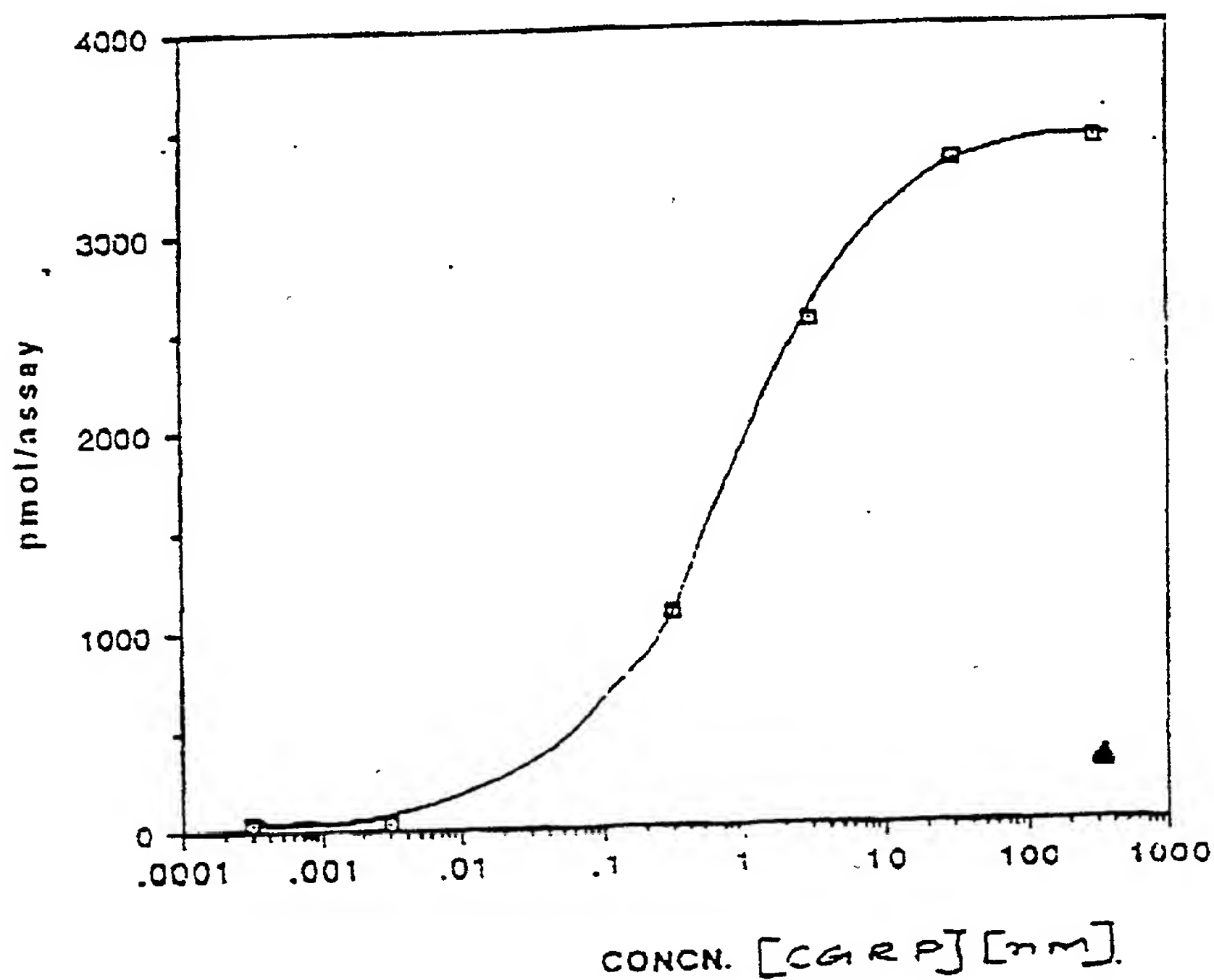


FIGURE 6

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EFFECT OF CGRP8-37 ON CGRP-MEDIATED cAMP IN pCDNHGGRPr STABLY TRANSFORMED 293 CELLS (CLONE 22)

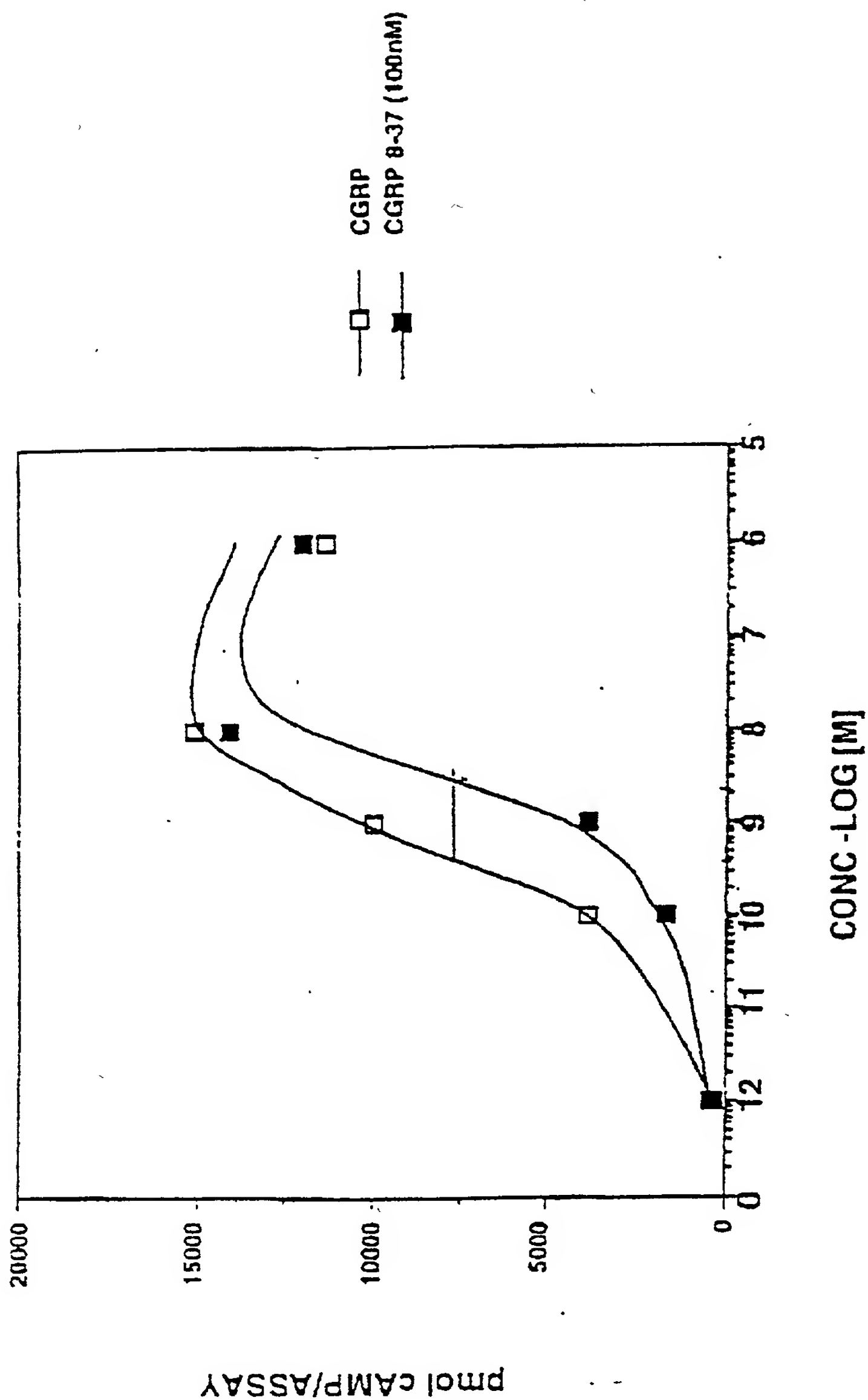
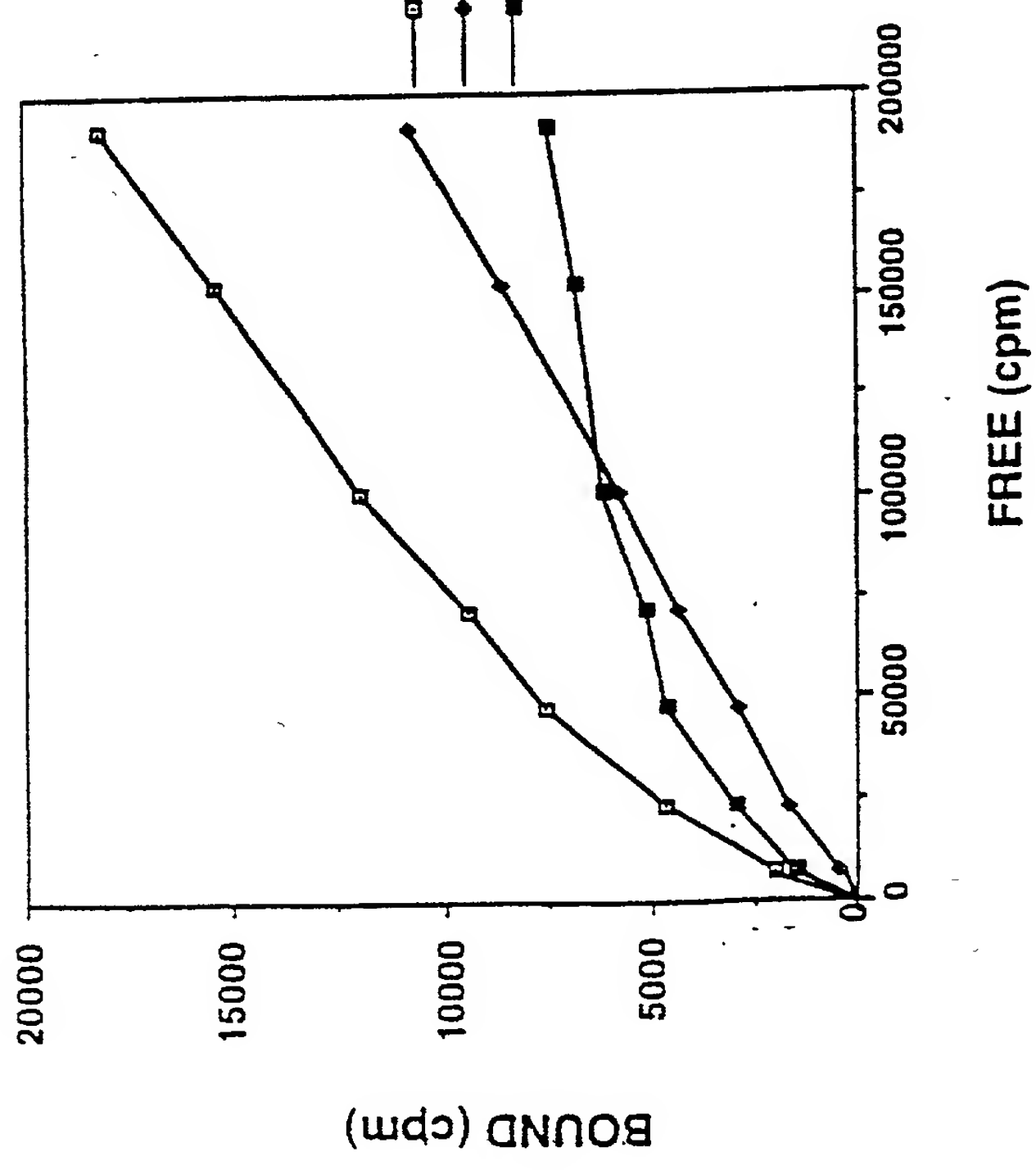


FIGURE 7

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A



B

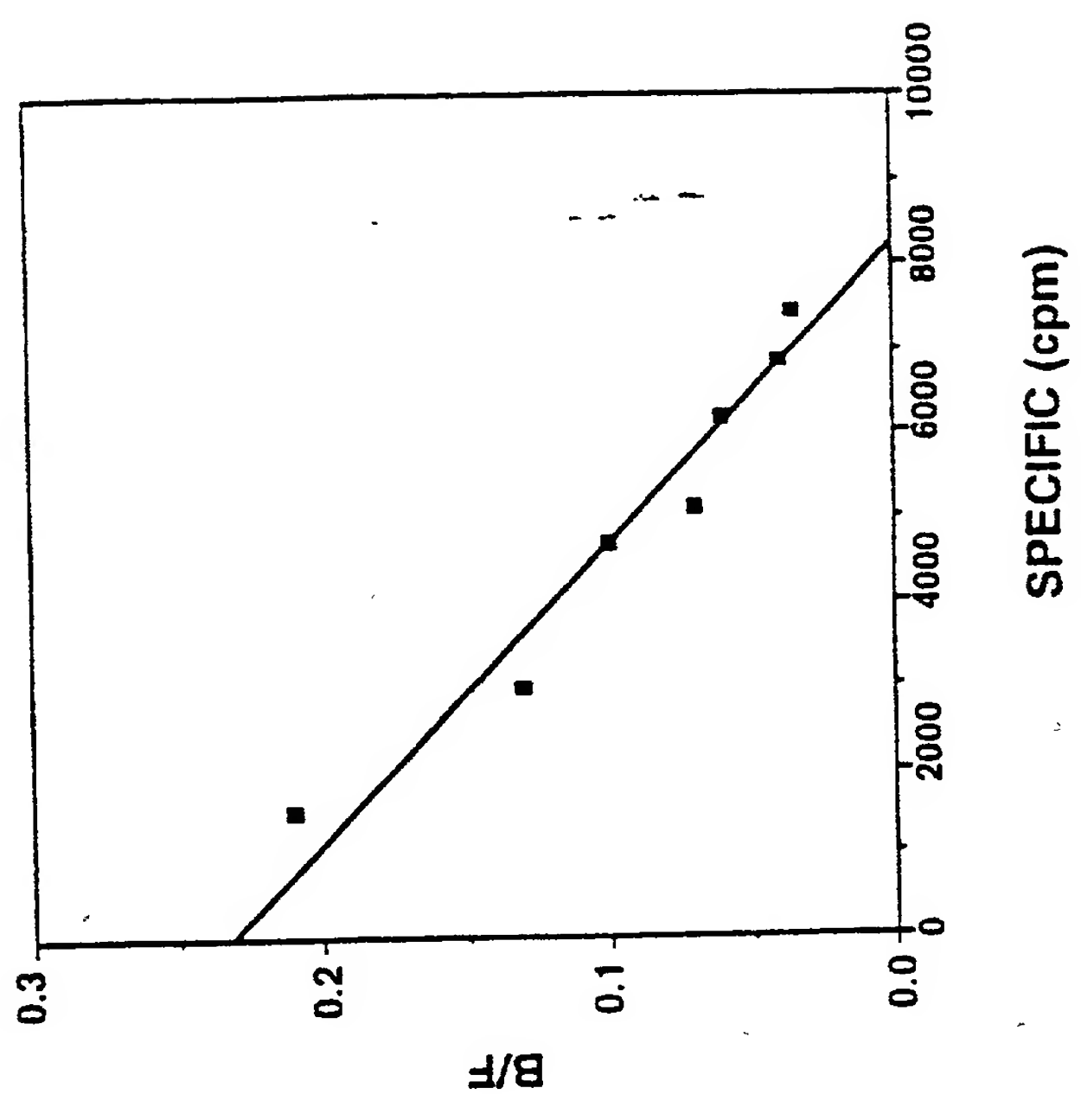


FIGURE 8

COMPETITION CURVES FOR REPRESENTATIVE CGRP ANALOGS
AGAINST [125]CGRP BINDING IN pCDNHCRPr TRANSFORMED CELL (CLONE 22) MEMBRANES

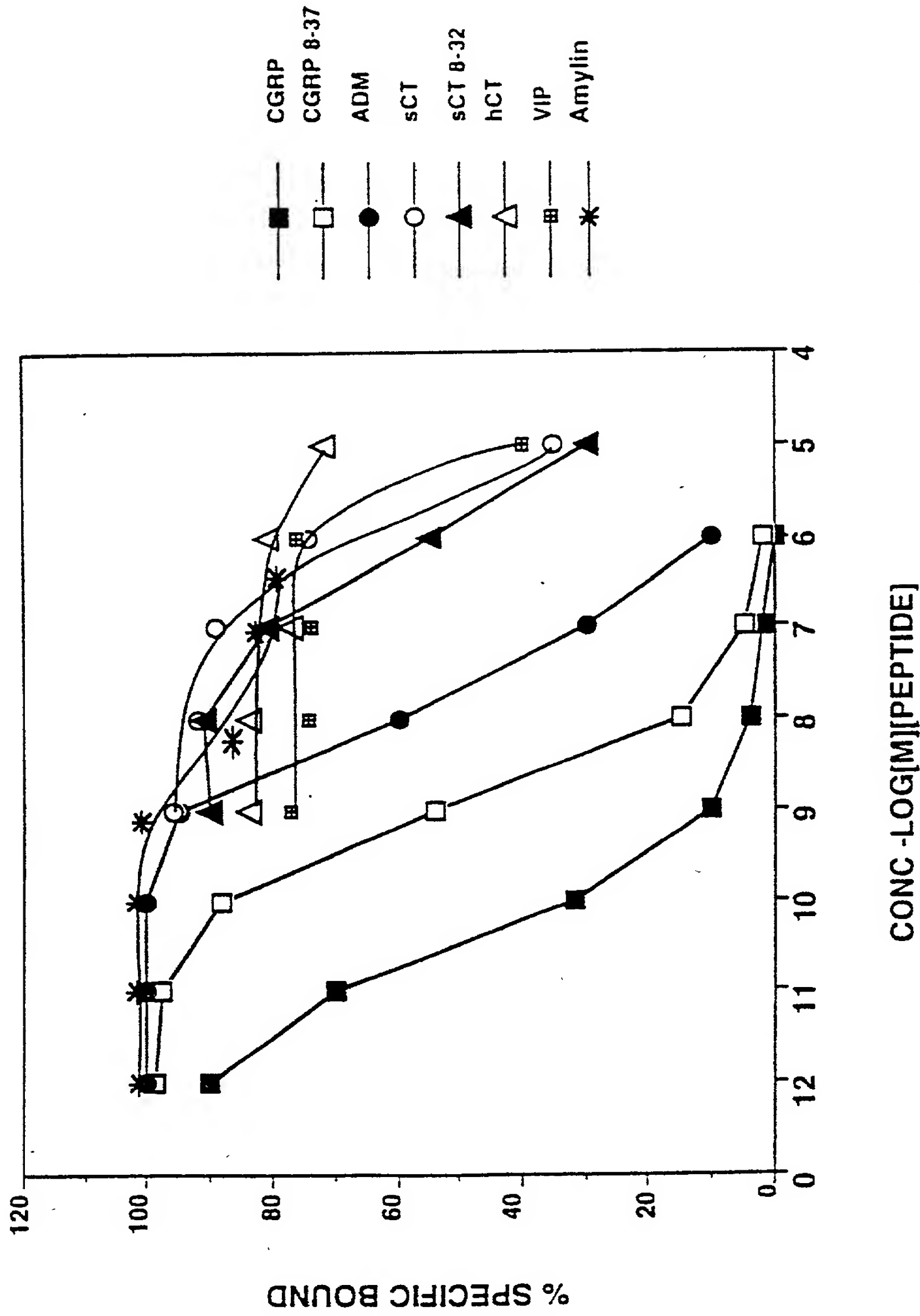


FIGURE 9
CGRP > CGRP 8-37 > ADM > sCT 8-32 > sCT > VIP > Amylin, hCT

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FIGURE 10

Comparison of Human and Rat CGRP Receptor Amino Acid Sequences

1 MEKKTLYFLVLLPFFMILVTAEEESPEDSIQLGVTRNKIMTAQYECY 49
 1 MMDKKCTLCLFLLLLNLMALIAAESEEGANQT.DLGVTRNKIMTAQYECY 49
 50 QKIMQDPIQQAEGVYCNRTWDGWLCWNDVAAGTESMQLCPDYFQDFDPSE 99
 50 QKIMQDPIQQGEGLYCNRTWDGWLCWNDVAAGTESMQLCPDYFQDFDPSE 99
 100 KVTKICDQDGNWFRHPASNRTWTNYTQCNVNTHEKVKTALNLFYLTIIIGH 149
 100 KVTKICDQDGNWFRHPDSNRTWTNYTLCNNSTHEKEKTALNLFYLTIIIGH 149
 150 GLSIASLLISLGIFYFKSLSCQRITLHKNLFFSFVCNSVVTIIHLTAVA 199
 150 GLSIASLIISLIIFYFKSLSCQRITLHKNLFFSFVCNSIVVTIIHLTAVA 199
 200 NNQALVATNPVSCKVSQFIHLYLMGCNYFWMLCEGIYLHTLIVVAVFAEK 249
 200 NNQALVATNPVSCKVSQFIHLYLMGCNYFWMLCEGIYLHTLIVVAVFAEK 249
 250 QHLMWYYFLGWGFPLIPACIHAIARSLYNDNCWISSDTHLLYIIHGPIK 299
 250 QHLMWYYFLGWGFPLIPACIHAIARSLYNDNCWISSDTHLLYIIHGPIK 299
 300 AALLVNLFLLNIVRVLITKLKVTHQAESNLYMKAVRATLILVPLLGIEF 349
 300 AALLVNLFLLNIVRVLITKLKVTHQAESNLYMKAVRATLILVPLLGIEF 349
 350 VLIPWRPEGKIAEEVDYIMHILMHFQGLLVSTIFCFNGEVQAILRRNW 399
 350 VLFPWRPEGKVAEEVDYVMHILMHYQGLLVSTIFCFNGEVQAILRRNW 399
 400 NQYKIQFGNSFSNSEALRSASYTVSTISDGPYSHDCPSEHLNGKSIHDI 449
 400 NQYKIQFGNGFSHSDALRSASYTVSTISDVQGYSHDCPTEHLNGKSIQDI 449
 450 ENVLLKPENLYN... 461
 450 ENVALKPEKMYDLVM 464

FIGURE 11